III. Public Transportation And Rail Map

1. **Save Map**
   a. Open the Highway map and using *File – Save As,* save the map as 'UrbanAreaName Public Transportation and Rail' map. The shapefiles needed for this map are the same as those in the Highway map.
   b. Make sure you turn off the Highway Map symbology of the roads.
      Right click on Roads and select *Properties - Symbology – Features – Single Symbol – OK.* The single symbol should be '**Reference Road**' symbol from the most current CTP Standard Style as explained in Step 3 of Highway Map procedures.

2. **Obtain the CTP Standard Template for Public Transportation And Rail Map**
   a. Click and navigate to **Layout View** in your map.
   b. Click on *Change Layout* button, [icon], located in the **Layout Toolbar**.
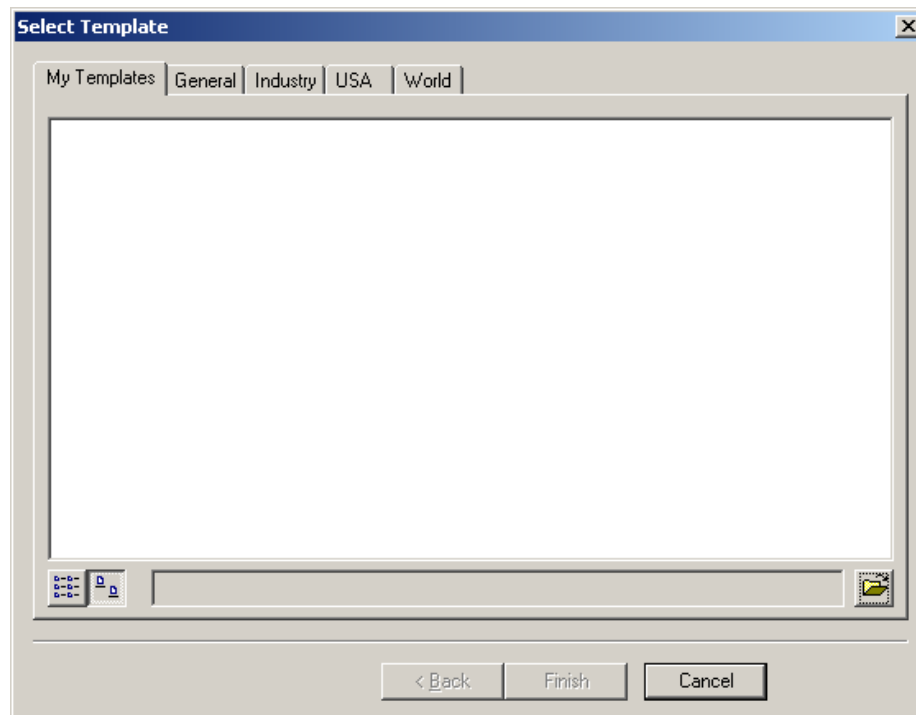
   c. Click on the *Browse* button, [icon], located in the bottom right hand corner of the above window.
   d. Navigate to **"S:\Shared\TPB Reference\Comprehensive Transportation Plan\CTP Map Templates"** and select a 'Public Transportation And Rail Map' template from the following four styles provided. It should be of the same style as for the other maps in this CTP.
      1. Landscape_Legend On Bottom
      2. Landscape_Legend On Side
      3. Portrait_Legend On Bottom
      4. Portrait_Legend On Side

NOTE: Once a particular type of template is selected, the remaining maps should also be selected from the same template style.

    e. Click *Open* after selecting the template for your map.
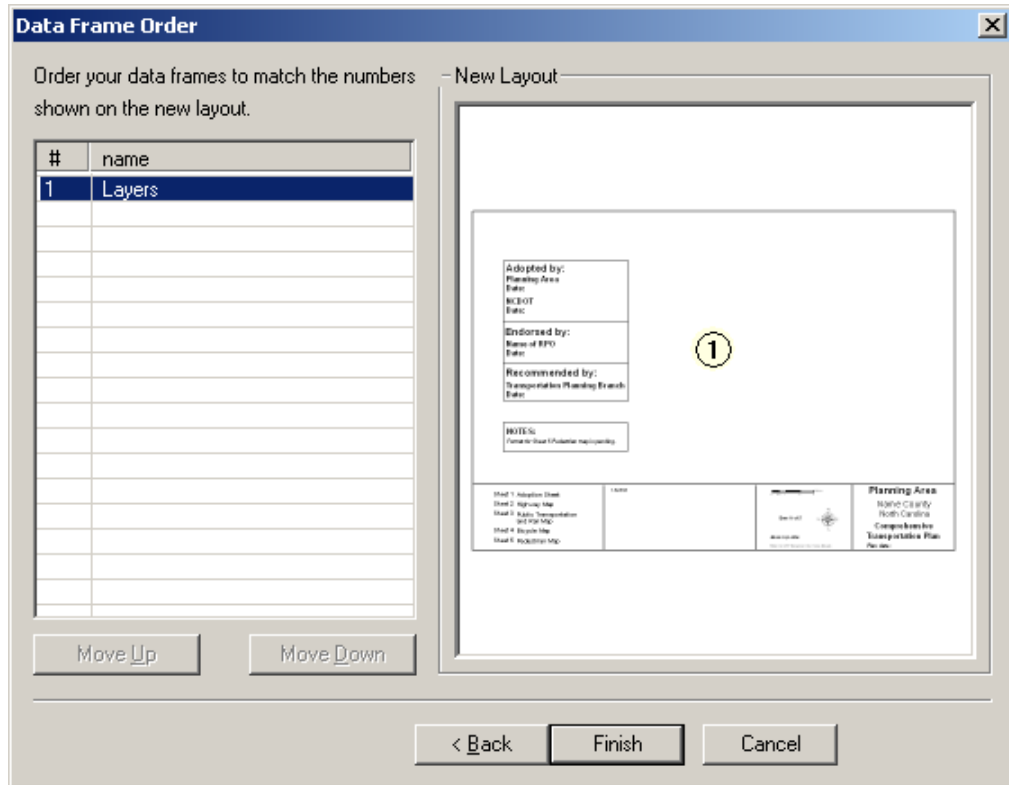
    f. Click on *Finish.*
    g. Save the map using *File-Save*.

3. Use Bookmark for Zoom Extent

In the **Layout View,** recall the bookmark created during the making of Adoption Sheet by selecting *View – Bookmark – Planning Area (Or whatever name you have given your bookmark).*

4. Add Transit Route Layer

If you already have a transit route (bus route) layer, add that shapefile to the map and follow the instructions below to edit and type in the designations (existing, recommended, and needs improvement) and match transit route symbols to the symbols in the template legend.

If you **do not** have a transit route layer, export the existing roads shapefile in your map as a new shapefile (called "StudyAreaName_Transit.shp") and use that to edit and show the designations of existing, recommended, and needs improvement, as explained in the following step.

5. Edit Transit Route Layer

    a. Open the attribute table of the shapefile added in Step 4, and using *Options –Add Field* add two new attributes, **CTPType_PT** and **Status_PT**, both of type Text and Length=50. Make sure the field names are documented in the metadata.
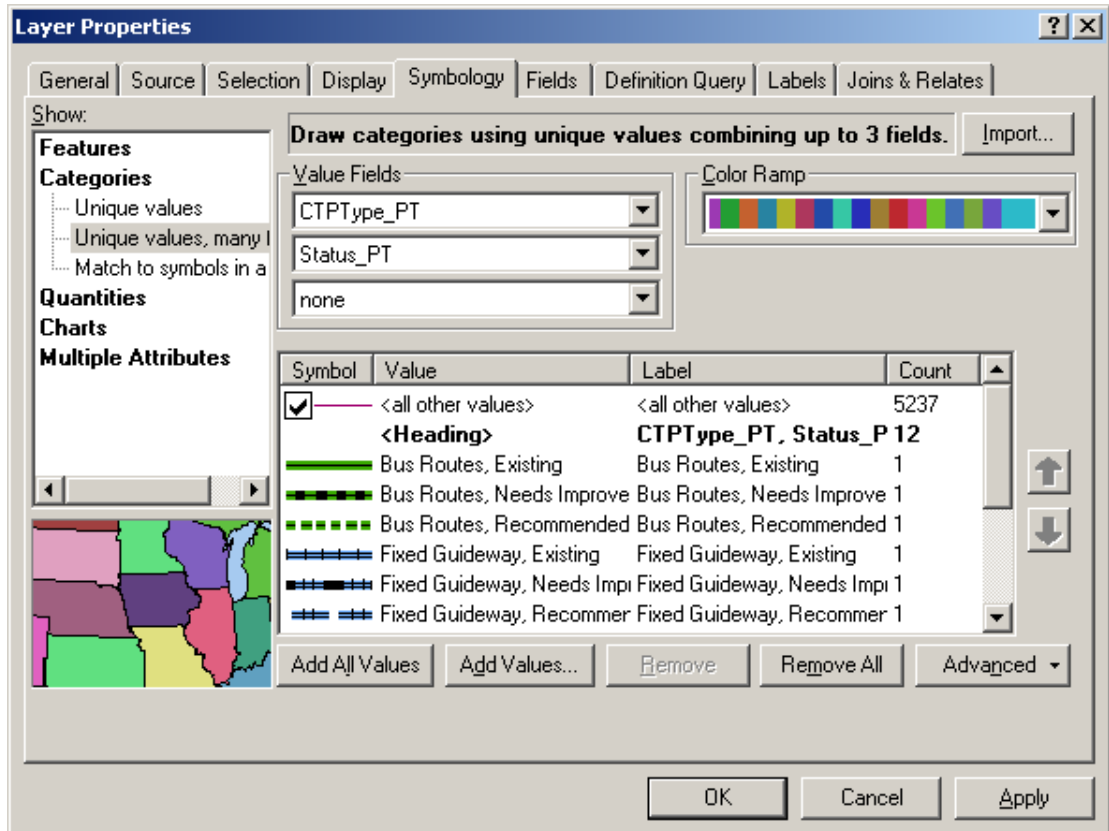
b. Using *Selection – Select by Attributes*, or using *Select Features* tool, ⬚ , and selecting by clicking, select the links that are Bus Routes (or the links that fall under Fixed Guideways or Operational Strategies)

c. Open the attribute table and click on *Selected* button at the bottom next to *Show All.* This should only display the records selected in step b.

d. Highlight and right click on **CTPType_PT** column. Select *Field Calculator*. In the box that comes up, type **"Bus Routes"** (or **"Fixed Guideway"** or **"Operation Strategies"** depending on the category you are working with)**.** If you want to edit each record separately while in the *Selected* tab, use *Editor - Start Editing* and once editing is completed, select *Editor- Save Edits - Stop Editing.*

NOTE: Since it is a Text field, this will not work unless you type in the data with quotations in the field calculator box.

e. In the attribute table, go to *All* tab and select *Options - Clear Selection.*

f. Using *Selection – Select by Attributes*, or using *Select Features* tool, ⬚ , and selecting by clicking, select the Bus Routes that are 'Existing' (or Needs Improvement or Recommended)

g. Open the attribute table and click on *Selected* button at the bottom next to *Show All.* This should only display the records selected in step f.

NOTE: In these selected records, the CTPType_PT field should already show up as updated/filled with appropriate data.

h. Highlight and right click on **Status_PT** column. Select Field Calculator. In the box that comes up, type **"Existing"** (or "Needs Improvement" or "Recommended")

i. Repeat steps *f to j* for Bus Routes - 'Needs Improvement' and 'Recommended'.

j. Similarly, repeat steps *b through i* to fill in
   - Fixed Guideway – Existing, Needs Improvement and Recommended
   - Operational Strategies - Existing, Needs Improvement and Recommended

k. To match the symbols of the layer to the Legend, right click on the shapefile in the Table of Contents and select *Properties - Symbology - Categories - Unique values, many fields*.

l. Select **CTPType_PT** and **Status_PT** under the Value Fields and click on *Add All Values.*

m. To change the symbol of each value, double click on the symbol for each and select the appropriate symbol from **CTP Standard Style** file for symbols as explained in Step 3 of Highway Map procedures.

6. Add Railroad Layer
Add the latest railroad shapefile to the map, if not already added.

7. Edit Railroad Layer
      a. Using the same methodology used for Bus Routes, Fixed Guideways and Operational Strategies in Step 5 above, edit the Railroad shapefile and symbology for Rail Corridor and High Speed Rail Corridor.

      b. Open the attribute table of **Railroad** shapefile and using *Options –Add Field* add two new attributes, **CTP_Type** and **CTP_Status**, both of type Text and Length=50. Make sure the field names are documented in the metadata.

      c. Using *Selection – Select by Attributes*, or using *Select Features* tool, ⌖ , and selecting by clicking, select the links for Rail Corridor.

      d. Open the attribute table and click on *Selected* button at the bottom next to *Show All.* This should only display the records selected in above step.

      e. Highlight and right click on **CTP_Type** column. Select *Field Calculator*. In the box that comes up, type **"Rail Corridor".** If you want to edit each record separately while in the *Selected* tab, use *Editor - Start Editing* and once editing is completed, select *Editor - Save Edits - Stop Editing.*

NOTE: Since it is a Text field, this will not work unless you type in the data with quotations in the field calculator box.

      f. In the attribute table, go to *All* tab and select *Options - Clear Selection.*

g. Using *Selection – Select by Attributes*, or using *Select Features* tool, and selecting by clicking, select the Rail Corridor that is 'Active'.

h. Open the attribute table and click on *Selected* button at the bottom next to *Show All.* This should only display the records selected in step g.

NOTE: In these selected records, the CTP_Type field should already show up as updated/filled with appropriate data.

i. Highlight and right click on **CTP_Status** column. Select Field Calculator. In the box that comes up, type **"Active".**

j. Repeat steps *f to i* for Rail Corridor - 'Inactive' and 'Recommended'.

k. Similarly, repeat steps *c through j* to fill in
   - High Speed Rail Corridor – Existing and Recommended

l. To match the symbols of the Railroad categories to the template Legend, right click on Railroad shapefile and select *Properties - Symbology - Categories - Unique values, many fields*.

m. Select **CTP_Type** and **CTP_Status** under the Value Fields and click on *Add All Values.*

n. To change the symbol of each value, double click on the symbol for each and select the appropriate symbol from the most current **CTP Standard Style** file for symbols as explained in Step 3 of Highway Map procedures.

NOTE: A route may have multiple designations and should be displayed on the map as such.

8. **Add Point Layer Data**
   a. The point layers in this map are the following:
      - Intermodal Connector
      - Rail Stops
      - Park and Ride Lot
   b. Add the Grade Separations shapefile created during the making of the Highway Map. The Highway Map procedures contain instructions on how to create this shapefile in the '**Add Interchange / Grade Separation layer'** section.
   c. Using the same methodology, create new shapefiles of type 'point' for the rest of the point layers.
   d. Add all the layers to the map and match all their symbols with the template Legend symbols. To change symbols, follow instructions from Step 3 of Highway Map procedures.

9. **Adjust Order of Shapefiles in Table Of Contents**
   a. Change the order of shapefiles to display data on the map accordingly. For example, the Planning Boundary and County Line should be displayed on top of the roads, rivers, etc.
   b. In the **Table Of Contents,** *Select* and then *drag-and-drop* shapefiles in the correct position.

NOTE: The layer at top in the **Table Of Contents,** displays on top in the map.

10. Update Map Data

    a. For each of the following items, go to the **Layout View** and using the **Layout Toolbar** zoom button, , locate and then zoom on the text on the map. Select the text box, right click and go to *Properties - Text* tab and type in the correct information for each of the following data, located on the map near the North Arrow:

- Planning Area – Change to your area name (Ex: Norwood)
- Plan Date – Provide appropriate date (Ex: June 20, 2008)
- Base Map Date - Provide appropriate date (Ex: August 4, 2006)

    b. For county plans that have donut areas (urban areas that have individual CTPs or thoroughfare plans) there should not be a date for the plans referenced. It should be shown as " See UrbanName CTP" or " See UrbanName Thoroughfare Plan".

    c. Make sure the north arrow is pointing in the correct direction with respect to your area/map.

    d. *Insert - Text* and type "DRAFT" and move the text around the legend area of the map. After a plan has been adopted locally, it will be changed from "DRAFT" to "RECOMMENDED" prior to being sent to the Board of Transportation.

    e. In addition, the map should be labeled as "Working Copy" instead of "Comprehensive Transportation Plan" until the CTP roadway classifications are applied. This should reduce the likelihood that a working map would be confused with a draft plan.

11. Insert Photo or Logo (optional)

Using the Standard Toolbar on top, select Insert - Picture and you can then insert a GIF photo or logo that is suitable for your area. The picture is not required, but if used, it must be a GIF. If it is not a GIF, the map will become too large of a file to be placed on the internet once it is completed. The logo should be of the area and not the TPB logo.

12. Labels And Symbols

Since this map is made from the Highway map, the labels should already exist in the right place. Make sure you match all the symbols in the map to the symbols in the template Legend. Turn off any unnecessary layer/shapefile by unchecking it in the **Table of Contents**. Remove/delete labels or symbols carried from the Highway map or add new according to the needs of the current map.

Following is a list of required layers to be labeled with the color and labeling convention.

Layer	Color(Highway Map)	Color(Other Maps)	Style
Rivers and Streams	Sodalite blue	Sodalite blue	Name in italics
Water Bodies	Sodalite blue	Sodalite blue	Name, but space the letters to take up the space
Interstates	Blue/Red	40% Gray	
US	Black	40% Gray	
NC	Black	40% Gray	
SR	Black	50% Gray	Name (SR #) i.e. Elm St. (SR 1111)
Roads	Black	50% Gray	Name
Municipality	Black	50% Gray	Name, but space the letters to take up the space
County	Black	50% Gray	Name, but space the letters to take up the space